



SPYWOLF

Security Audit Report



Completed on
February 25, 2023

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OVERVIEW

This audit has been prepared for **Bubble DeFi** to review the main aspects of the project to help investors make an informative decision during their research process.

You will find a summarized review of the following key points:

- ✓ Contract's source code
- ✓ Owners' wallets
- ✓ Tokenomics
- ✓ Team transparency and goals
- ✓ Website's age, code, security and UX
- ✓ Whitepaper and roadmap
- ✓ Social media & online presence

“

The results of this audit are purely based on the team's evaluation and does not guarantee nor reflect the projects outcome and goal

- SPYWOLF Team -

”





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BUBBLE DEFI



PROJECT DESCRIPTION

According to their whitepaper:

Bubble DeFi is a decentralized ecosystem creating sustainable liquidity products for decentralized finance (DeFi). The protocol allows users to create their own liquid assets and provides a marketplace for buying/selling them.

Release Date: Presale starts on February 27, 2023

Category: DeFi/DEX



CONTRACT 1 INFO

Token Name Bubble	Symbol BUB
Contract Address 0xa3E7e143b69AEaa2B435EFD7E40C4A7D1d6D8296	
Network Arbitrum	Language Solidity
Deployment Date Feb 23, 2023	Verified? Yes
Total Supply 100,000,000	Status Not launched

TAXES



*Taxes can be changed in future



Our Contract Review Process

The contract review process pays special attention to the following:

- ✓ Testing the smart contracts against both common and uncommon vulnerabilities
- ✓ Assessing the codebase to ensure compliance with current best practices and industry standards.
- ✓ Ensuring contract logic meets the specifications and intentions of the client.
- ✓ Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- ✓ Thorough line-by-line manual review of the entire codebase by industry experts.

Blockchain security tools used:

- OpenZeppelin
- Mythril
- Solidity Compiler
- Hardhat



VULNERABILITY CHECK

Design Logic	Passed
Compiler warnings.	Passed
Private user data leaks	Passed
Timestamp dependence	Passed
Integer overflow and underflow	Passed
Race conditions and reentrancy. Cross-function race conditions	Passed
Possible delays in data delivery	Passed
Oracle calls	Passed
Front running	Passed
DoS with Revert	Passed
DoS with block gas limit	Passed
Methods execution permissions	Passed
Economy model	Passed
Impact of the exchange rate on the logic	Passed
Malicious Event log	Passed
Scoping and declarations	Passed
Uninitialized storage pointers	Passed
Arithmetic accuracy	Passed
Cross-function race conditions	Passed
Safe Zeppelin module	Passed
Fallback function security	Passed



THREAT LEVELS

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and access control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time. We categorize these vulnerabilities by the following levels:

High Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Medium Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Low Risk

Issues on this level are minor details and warning that can remain unfixed.

Informational

Information level is to offer suggestions for improvement of efficacy or security for features with a risk free factor.



FOUND THREATS

High Risk

No high risk-level threats found in this contract.

Medium Risk

No medium risk-level threats found in this contract.

Low Risk

No low risk-level threats found in this contract.



Informational

Owner can set buy/sell fees up to 5%.
Combined buy+sell=10%.

```
uint256 public percentDivider = 1000;

function setBuyFeePercent(uint256 _lwFee, uint256 _lpFee)
    external
    onlyOwner
{
    lpFeeOnBuying = _lwFee;
    liquidityFeeOnBuying = _lpFee;
    require(
        _lwFee.add(_lpFee) <= percentDivider.div(20),
        "BUB: can't be more than 5%"
    );
}

function setSellFeePercent(uint256 _lwFee, uint256 _lpFee)
    external
    onlyOwner
{
    lpFeeOnSelling = _lwFee;
    liquidityFeeOnSelling = _lpFee;
    require(
        _lwFee.add(_lpFee) <= percentDivider.div(20),
        "BUB: can't be more than 5%"
    );
}

function totalBuyFeePerTx(uint256 amount) public view returns (uint256) {
    uint256 fee = amount.mul(lpFeeOnBuying.add(liquidityFeeOnBuying)).div(
        percentDivider
    );
    return fee;
}

function totalSellFeePerTx(uint256 amount) public view returns (uint256) {
    uint256 fee = amount
        .mul(lpFeeOnSelling.add(liquidityFeeOnSelling))
        .div(percentDivider);
    return fee;
}
```



Informational

Owner can include/exclude address from fees, max transaction limit and max wallet limit.

If dex pair address is included in max wallet and max wallet limit is too low, selling will fail.

```
function includeOrExcludeFromFee(address account, bool value)
    external
    onlyOwner
{
    isExcludedFromFee[account] = value;
}

function includeOrExcludeFromMaxTxn(address account, bool value)
    external
    onlyOwner
{
    isExcludedFromMaxTxn[account] = value;
}

function includeOrExcludeFromMaxHolding(address account, bool value)
    external
    onlyOwner
{
    isExcludedFromMaxHolding[account] = value;
}
```



Informational

Owner can only exclude address from blacklist.

```
function addOrRemoveBots(address account)
    external
    onlyOwner
{
    isBot[account] = false;
}
```

Owner can set max transaction limit but cannot lower it than 0.1% of total supply.

```
function setMaxTxnLimit(uint256 _amount) external onlyOwner {
    require(_amount >= _totalSupply/1000, "BUB: should be greater than 0.1%");
    maxTxnLimit = _amount;
}
```



RECOMMENDATIONS FOR

GOOD PRACTICES

1

Consider fundamental tradeoffs

2

Be attentive to blockchain properties

3

Ensure careful rollouts

4

Keep contracts simple

5

Stay up to date and track development

BUBBLE DEFI

GOOD PRACTICES FOUND

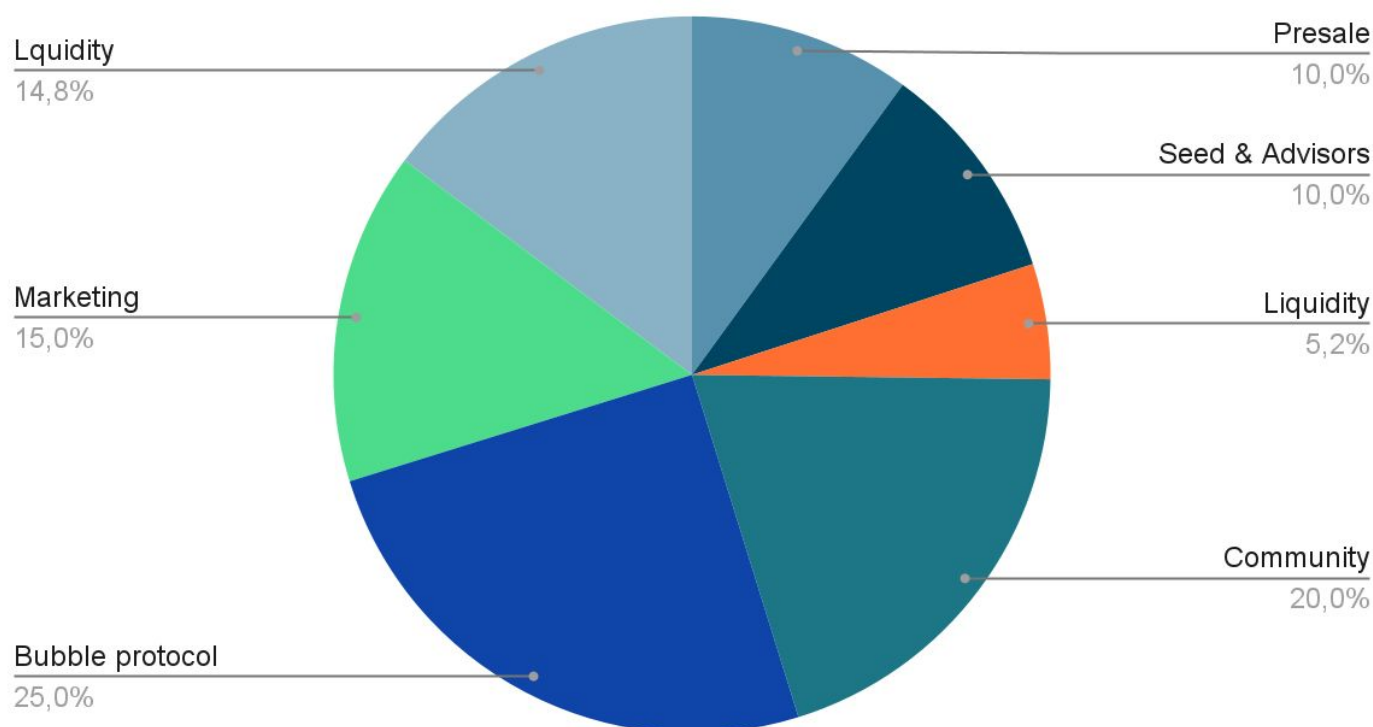
- ✓ The owner cannot mint new tokens after deployment
- ✓ The owner can set max transaction limit, but cannot lower it than 0.1% of total supply.
- ✓ The smart contract utilizes "SafeMath" to prevent overflows



The following initial token's distribution information is based on project's website and/or whitepaper:

- 10% - Presale
- 10% - Seed & Advisors
- 5.2% - Liquidity
- 25% - Bubble Protocol *
- 20% - Community *
- 15% - Marketing *
- 14.8% - Liquidity *

Tokens distribution



*For more information about vesting periods, check Pinksale's presale page:
<https://www.pinksale.finance/launchpad/0xF6C77D8D2a46a05dA2383031533534DD8AB3EF90?chain=Arbitrum>

TOKENOMICS



THE TEAM



The team has privately doxxed to PINKSALE

<https://pinksale.notion.site/Bubble-Defi-KYC-Verification-1cc386eb9de34953a0d6e5cefde5d0be>

Bubble Defi - KYC Verification

This KYC page verifies that **Four Members** of the project has successfully completed the verification process at PinkSale. Project info:

- Project Name: Bubble Defi
- Project Website: <https://bubbledefi.com/>
- KYC Issued: February 26, 2023





WEBSITE

Website URL

<https://bubbledefi.com/>

Domain Registry

<https://www.namecheap.com>

Domain Expiration

Expires on 2023-12-04

Technical SEO Test

Passed

Security Test

Passed. SSL certificate present

Design

Single page design,
appropriate color scheme
and graphics.

Content

The information helps new
investors understand what
the product does right away.
No grammar mistakes found
.

Whitepaper

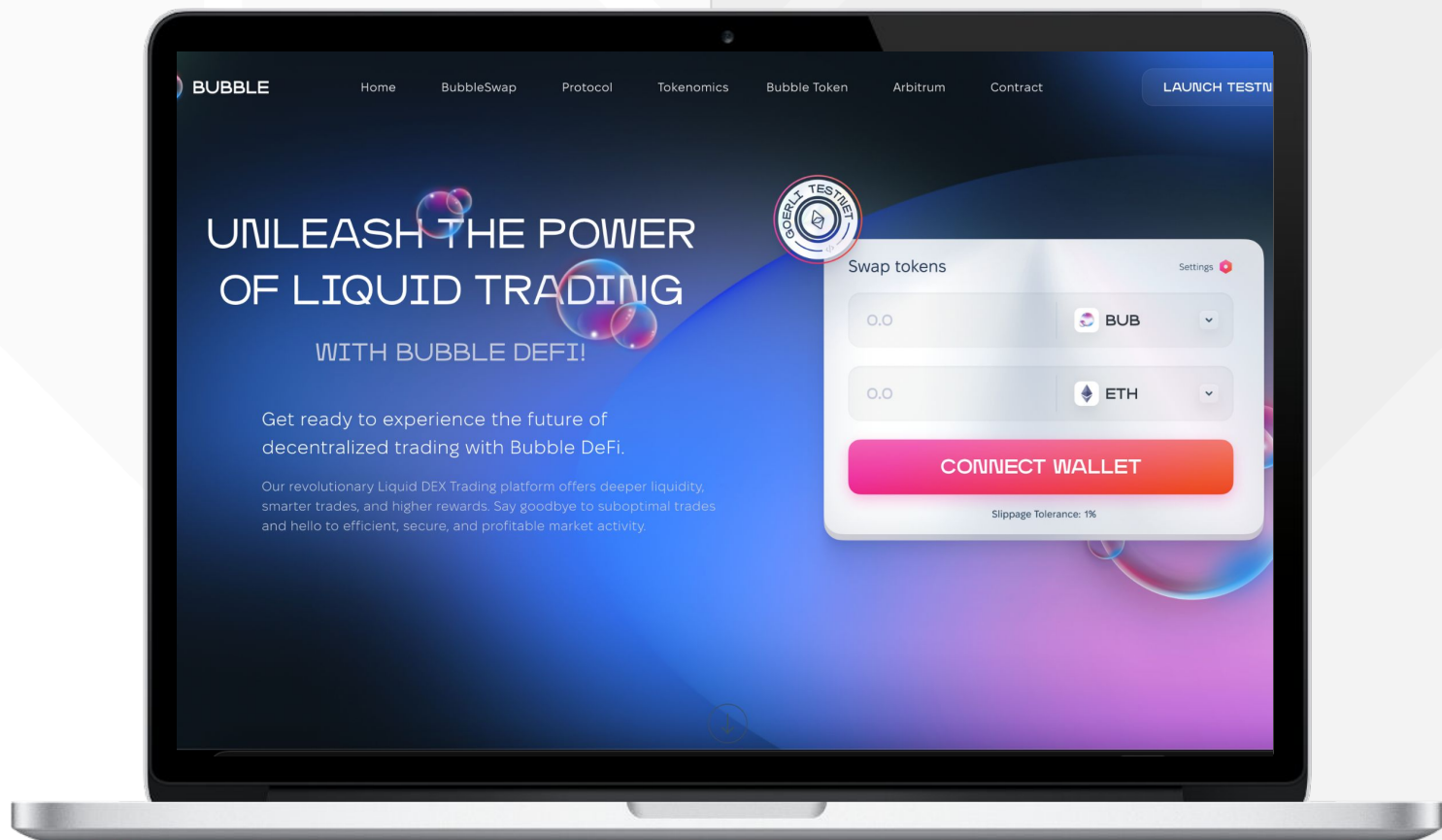
Well written, explanatory.

Roadmap

Yes, goals set with time
frames.

Mobile-friendly?

Yes



bubbledefi.com

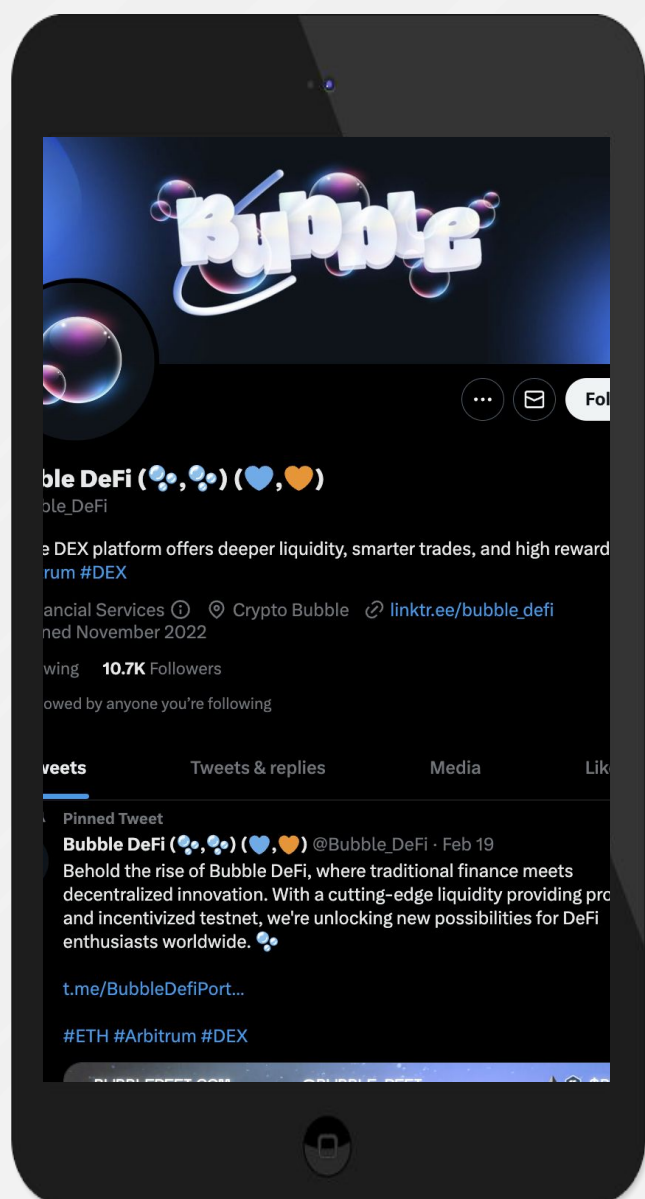


SOCIAL MEDIA & ONLINE PRESENCE



ANALYSIS

Project's social media pages are active with organic members



Twitter

@Bubble_DeFi

- 10 700 followers
- Active
- Posts frequently



Discord

<https://discord.com/invite/J99shRsxHC>

- 7 042 members
- Active members
- Active mods



Telegram

@BubbleDefiPortal

- 5 310 members
- Active members
- Active mods



Medium

@Bubble_DeFi

- 143 followers
- 4 articles



SPYWOLF

CRYPTO SECURITY

Audits | KYCs | dApps
Contract Development

ABOUT US

We are a growing crypto security agency offering audits, KYCs and consulting services for some of the top names in the crypto industry.

- ✓ OVER 150 SUCCESSFUL CLIENTS
- ✓ MORE THAN 500 SCAMS EXPOSED
- ✓ MILLIONS SAVED IN POTENTIAL FRAUD
- ✓ PARTNERSHIPS WITH TOP LAUNCHPADS, INFLUENCERS AND CRYPTO PROJECTS
- ✓ CONSTANTLY BUILDING TOOLS TO HELP INVESTORS DO BETTER RESEARCH

To hire us, reach out to
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Disclaimer

This report shows findings based on our limited project analysis, following good industry practice from the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, overall social media and website presence and team transparency details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report.

While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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No applications were reviewed for security. No product code has been reviewed.